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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/710,676		07/28/2004	Stephen Edward Ronczy	040761KEL116	4675
32583	7590	11/15/2006		EXAMINER	
KELLOGO	BROW	N & ROOT LLC	DOERRLER, WILLIAM CHARLES		
ATTN: IP L	EGAL DI	EPARTMENT			
601 JEFFER	RSON AV	ENUE	ART UNIT	PAPER NUMBER	
MOTISTON	TY 770	nn2	3744		

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati	on No.	Applicant(s)					
	Office Assista Communication	10/710,6	76	RONCZY, STEPHEN EDWARD					
	Office Action Summary	Examine		Art Unit					
<u> </u>		William C	-	3744					
Period fo	The MAILING DATE of this communica or Reply	ation appears on the	e cover sheet with the c	orrespondence address					
WHIC - External after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAI assions of time may be available under the provisions of the SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statute to reply within the set or extended period for reply will reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF TH 37 CFR 1.136(a). In no ev ication. lory period will apply and w I, by statute, cause the app	HIS COMMUNICATION ent, however, may a reply be tin ill expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133).					
Status									
1)	Responsive to communication(s) filed	on .							
		)⊠ This action is r	on-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)🖂	☑ Claim(s) <u>1-21</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) <u>1-16 and 18-21</u> is/are allowed.								
6)⊠	Claim(s) <u>17</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	B) Claim(s) are subject to restriction and/or election requirement.								
Applicati	on Papers								
9)[	The specification is objected to by the E	Examiner.							
10)⊠ The drawing(s) filed on <u>28 July 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.									
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority ι	ınder 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:									
	1. Certified copies of the priority documents have been received.								
	<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>								
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
Attachmen	• •		:						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date									
3) 🛛 Infor	3) 🔯 Information Disclosure Statement(s) (PTO/SB/08) 5) 🔲 Notice of Informal Patent Application								
Pape	Paper No(s)/Mail Date <u>7-28-2004</u> . 6) Other:								

Art Unit: 3744

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Manley.

Claim 17 is an apparatus claim that is largely functional language. Although the same language makes the method claims in the application allowable, all that is required in an apparatus claim is that the reference must be capable of performing the functional language. The apparatus which is structurally claimed in claim 17 (and disclosed by Manley) has a first column (C300) with a means for providing reflux (heat exchanger E300 and associated separation tank and pipelines which are not numbered) and a reboiler (E303). The bottoms from the first column are sent to a second column (C301) with means for providing reflux (heat exchanger E304 and associated separation tank and pipelines which are not numbered) and a reboiler (E305). The columns of Manley are disclosed to have rectifying (absorbing) and stripping sections. The claimed percentages are not shown in Manley, but these are the functional language that can be performed by the apparatus shown by Manley, depending on the feed and the conditions of the column set by the user.

Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Jordan et al.

Art Unit: 3744

Claim 17 is an apparatus claim that is largely functional language. Although the same language makes the method claims in the application allowable, all that is required in an apparatus claim is that the reference must be capable of performing the functional language. The apparatus which is structurally claimed in claim 17 (and disclosed by Jordan et al), has a first column (24) with a means for providing reflux ( the heat exchanger at the top of the column and associated separation tank and pipelines which are not numbered) and a reboiler (at the bottom of the column, but also not numbered). The bottoms from the first column are sent to a second column (28) with means for providing reflux (the heat exchanger which cools the overhead from the second column and associated separation tank and pipelines which are not numbered) and a reboiler (not numbered). The columns of Jordan et al are capable of absorbing and stripping the feed to provide the disclosed products. The claimed percentages are not shown in Jordan et al, but these are the functional language that can be performed by the apparatus shown by Jordan et al, depending on the feed to the system and the user set conditions for the columns.

### Allowable Subject Matter

Claims 1-16 and 18-21 are allowed.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schroeder et al, Kuechler et al, Borst, Coulter et al, Strum and Sumner show multiple column systems for separating ethane and other hydrocarbons.

Art Unit: 3744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> William C Doerrler **Primary Examiner**

Page 4

Art Unit 3744

**WCD**